

**NATIONAL RAILWAYS OF ZIMBABWE  
FINAL CLOSE-OUT**

**REGIONAL TRANSPORT DEVELOPMENT II  
PROJECT NUMBER 690-0248**

**PROJECT ASSISTANCE COMPLETION REPORT**

***PREPARED FOR:***

**USAID/ZIMBABWE  
CONTRACT NUMBER LAG-I-00-97-00013-00  
DELIVERY ORDER NUMBER 801**

***PREPARED BY:***

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## **PROJECT ASSISTANCE COMPLETION REPORT**

### **1.0 INTRODUCTION**

In August 1990 USAID/Zimbabwe authorized the Regional Transport Development II Project (690-0248) for the National Railways of Zimbabwe at a life of project funding level of US\$39.4 million. A project grant agreement was executed in late August 1990 with the Government of Zimbabwe for a first tranche of US\$9,372,791. In March 1991, the project agreement was amended and a second tranche of US\$30,027,000 was obligated to fully fund the project at US\$39,399,791.

#### **1.1 Project Goal and Purpose**

The project contributes to the goal of improving the export performance contributing to economic growth. A sub-goal was a reduction in economic losses attributable to costly and unreliable rail transport costs in southern Africa. The project purpose was to strengthen and expand the capacity and operational efficiency of the National Railways of Zimbabwe (NRZ).

#### **1.2 Project Description**

The project represented USAID's contribution to a multi-donor program led by the World Bank to improve the operational, financial and managerial performance of NRZ. The project components included the procurement of 13 General Motor diesel electric locomotives and spare parts. The locomotives were to permit NRZ to: 1) replace unsuitable locomotives procured prior to Zimbabwe achieving independence; 2) reduce the number of locomotive types from 13 to 5 and benefit from associated cost savings in maintenance, spare parts, and training; 3) and benefit from greater efficiency of North American-designed locomotives. USAID also financed a two-year supply of maintenance spare parts; selected capital spares, tools and testing equipment. The project also funded technical training for locomotive maintenance with a two-year secondment to NRZ of a GM service engineer.

The Project Agreement was amended in 1992 to provide for (i) the procurement of 43 Caterpillar engines for shunting locomotives; (ii) spare parts to repair 4 damaged diesel electric locomotives, and (iii) an audit and an evaluation study.

#### **1.3 Project Donors and Financing Plan**

The multi-donor effort led by the World Bank to restructure NRZ along with the United States included such countries as Germany, Switzerland, Austria, Finland, Denmark and the United Kingdom. Annex 1.1 presents the financing plan for the overall project and the status of donor financial contributions and inputs.

USAID/Zimbabwe commissioned a Special/Final Evaluation in early 1994. The evaluation was completed in February, 1994. The recommendations contained in the evaluation formed the basis for the additional amendment to the Project Agreement and the use of the remaining project funds. The

amended Project Agreement reprogrammed US\$4.4 million for locomotive spare parts, as well as equipment and spare parts for the road transport sector. The amendment further provided support for a Voluntary Early Retirement Scheme (VERS) of NRZ under a Commodity Import-Like Program and extended the Project Assistance Completion Date (PACD) to September 30, 1997. Only US\$3.0 million was dispersed under the amendment. The remaining US\$1.4 million of project funds was de-obligated in 1997 and the PACD was extended to September 30, 1997 to permit the preparation of the evaluation/final close-out report and the Project Assistance Completion Report.

## **1.4 Purpose of the Report**

This Project Assistance Completion Report (PACR) covers the Regional Transport Development II Project, (690-0248) of the National Railways of Zimbabwe from 1990 to 1997. The purpose of the PACR is to conduct, *inter alia*, a final assessment of the status of the completion of project elements in terms of: (a) planned versus actual inputs; (b) a review project of accomplishments; (c) a review of assistance provided; (d) recommendations for final adjustments (e) defining any continuing monitoring responsibilities; (f) a review of data collection results and identify any remaining evaluations required.

## **2.0 IMPLEMENTATION STATUS**

### **2.1 USAID Project Financing**

Under the World Bank-led umbrella project, USAID authorized project budget was US\$39.4 million as presented in Annex 1.2. In 1992, Amendment No. 1 added project elements that included: (i) repair and rehabilitation of 4 damaged locomotives by O. Conolly & Co., a private firm; (ii) conducting a workshop modernization study; (iii) training for executive manager and locomotive maintenance training; (iv) and payments to cover wagon-hire charges during the 1991/1992 drought.

A Commodity Import-Like Program (CILP) was authorized on February 21, 1995 as an amendment to the Project Agreement of August 22, 1990. Funding for the CILP was authorized at a level of US\$4.4 million which represented a reprogramming of the remaining project funds. Assistance provided under the project included procurement of locomotive spare parts and financial support for a Voluntary Early Retirement Scheme for the National Railways of Zimbabwe.

### **2.2. Final Level of Inputs and Outputs**

#### **2.2.1 Project Design.**

The CILP was designed to contribute to (1) improved inter-modal transport operations and (2) improved operational and financial performance of NRZ. Inter-modal transport operations was to be achieved through the provision of spare parts and equipment to the private sector in road transport. Improved operational and financial performance was to be achieved by improving NRZ's locomotive availability rate with the provision of locomotive spare parts, and through the reduction

of NRZ's labor force. Although broader objectives were contemplated, the CILP essentially evolved into a spare parts financing program for NRZ and financial support for VERS.

*Spare Parts Procurement.* The project provided US\$3.0 million to procure locomotive spare parts. However, the original RTD II could have procured the spare parts from U.S. manufacturers in a more direct, and perhaps less expensive way than what occurred. USAID could have granted NRZ US\$3 million for purchase of the spare parts, on the condition the railway finance its VERS program by an equivalent local currency amount.

*Voluntary Early Retirement Scheme.* The actual cost per employee in the VERS program exceeded the original PPS estimate by a factor of almost three. Apparently, this fact was not brought to the Mission's attention nor, as far as can be ascertained, addressed with NRZ. The results were that significantly fewer employees (400 instead of 1,125) retired voluntarily than originally contemplated under the project.

### **2.2.2 Implementation Results.**

Despite being consistent with USAID's strategy to increase efficiencies in the rail sector by encouraging private sector involvement, promoting regionalism in resource use and supporting parastatal staff reductions, implementation of project elements was not without difficulty. The CILP was administratively unwieldy and the project objectives were costly to achieve.

*Project administration.* Implementation of the CILP resulted in expenditures, primarily by USAID, of additional administrative cost and effort. These administrative costs were primarily in the area of payment procedures, which could have been avoided had the implementation process been streamlined. In spite of this, administration of the CILP was implemented in accordance USAID regulations for Commodity Import Programs.

The administration of the VERS program, in terms of disbursement procedures, was more straightforward than the spare parts component. NRZ and USAID personnel worked closely to implement VERS. NRZ's Pension Fund also applied the funds to retirement packages in accordance with the Project Agreement and USAID regulations.

*Project management.* Over the life of the CILP, the project managers changed seven times. This deprived the CILP of consistent management and follow-up, created inefficiencies and frustrated project administration. After initial efforts ended in early 1995, little or no effort was undertaken to interest other importers in the CILP or implement the program's inter-modal transport objectives. This resulted in the curtailment of the project and the de-obligation of US\$1.4 of project funds. Changes in the project managers also contributed to the CILP component not being implemented as planned and the long period between procurement authorization and delivery date.

*Delivery and use of resources.* Information acquired in this Evaluation indicates that the parts ordered by the end-user, supplied by the U.S. and processed by the importer was done in accordance with USAID regulations. Moreover, NRZ's spare parts inventory is adequately managed and the used for the intended purpose or are being held for locomotive repairs and overhaul.

### 3.0 PROJECT OUTPUTS

The PPS identified two outputs for the project. They are workforce reduction and inter-modal transport operations. The measurable results are the following:

- a. *Workforce reduction.* The indicator for workforce reduction was a reduction in NRZ's workforce of 3,000 employees. NRZ did not achieve this output but did make significant progress towards its achievement. Between the 1994 and 1997, the labor force decreased by 17.8 percent to 11,434 from 13,918 employees. This represents a workforce reduction of 2,484 employees which is 516 employees below the EOPS target of 3,000. USAID assistance under the project accounted for 400 employees or 16 percent of the total workforce reduction; and
- b. *Improved inter-modal transport operations.* Although it was not implemented, this project component would have promoted inter-modal competition as conceived of in the PPS. As such, no output results are reported in this evaluation. The assistance would have provided support to road haulers and road construction equipment firms. In 1997, USAID/Zimbabwe deobligated the remaining project funds of US\$1.4 million.

### 4.0 PURPOSE-LEVEL IMPACTS

The provision of locomotive spare parts had a significant impact on NRZ'S operational performance. This impact was observed primarily in terms of reductions in the railway's locomotive maintenance backlog and in an increase in locomotive availability. These impacts contribute to the project purpose of expanding capacity and operational efficiency of the Zimbabwe railway system. Details of the purpose level impacts are discussed below.

#### 4.1 Capacity and Operational Efficiency

- ▶ *Locomotive availability.* From 1994 to 1996 locomotive availability rates for class 9A shunting locomotive went from 50 percent to about 80 percent as a direct result of the USAID financed re-engine program. Similarly, mainline locomotives such as the 4 rebuilt DE 10A locomotives went from 63 percent before 1994 to about 70 percent in 1997. Additionally, the 13 new DE 11As consistently achieved average annual availability rates of approximately 80 percent from 1994 to 1997.
- ▶ *Freight traffic.* Increased locomotives availability resulted in improved freight operations and as wagon utilization improved. This led to increases in the volume of rail freight traffic. Total freight volumes increased from 10.5 million metric tons in 1994 to 12.2 million metric tons in 1997, an increase of 16.5 percent or 1.74 million metric tons.
- ▶ *Staffing and productivity.* Workforce reduction and increased labor productivity were key evaluative impacts of the CILP. Assistance provided under the CILP resulted in 400 employees taking advantage of the VERS program from 1994 to 1997. Similarly, staff

productivity as measured by net tons kilometers per employee increased from 311 NTKMS/employee in 1994 to 426 NTKMS/employee in 1997, thus exceeding the policy objective of the Conditions Precedent.<sup>1</sup>

## 4.2 Financial Performance Impact

Despite the significant improvement in systems capacity and operational efficiency discussed above the impacts did not translate into an improvement in NRZ's overall financial performance.

- ▶ *Operating revenues and expenses.* NRZ had a net surplus in 1994 and 1995 of Z\$33.6 million and Z\$256.9 million. However, the railway's financial position in 1996 and 1997 revealed net deficits of Z\$252.7 million and Z\$184.2 million. NRZ did, however, have impressive operating revenue gains for the period with a net operating surplus of Z\$269 million. Operating revenues for rail services ranged from Z\$994 million in 1994 to Z\$1.55 billion in 1997 against operating expenses of Z\$648 million and Z\$1.106 million from 1994 to 1997. Although increases in rail tariffs were contributing factors, much of the operating revenue gains between 1994 and 1997 is directly attributable to the increases in the rail freight volume, as a result of improved locomotive availability.
- ▶ *Wage- revenue ratio.* Despite the labor force reductions, NRZ did not achieve the wage-revenue ratio of 35 percent in accordance with the Condition Precedent. This was primarily the result of an enhanced employee remuneration program to retain staff. From 1994 to 1997, NRZ's wage revenue ratio ranged from 56.6 percent to 54.2 percent, well in excess of the target ratio of 35 percent.<sup>2</sup>

## 5.0 ASSESSMENT OF PROJECT ACCOMPLISHMENTS

### 5.1 1990-1994 Period

The assessment of project accomplishments for the period from 1990 to 1994 was fully detailed in the Special/Final Evaluation Report of 1994 and, as such, the reader is directed there for more information. This PACR covers the period from 1994 to 1997 and addresses the assessment of project accomplishments for this period.

### 5.2 1994-1997 Period

The prospects for sustainability of the project achievements for the 1994-1997 period are promising.

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<sup>1</sup> One of the Conditions Precedents of the Amended Project Agreement of 1994 to reprogram the remaining projects funds required NRZ to provide a policy statement of the railways efforts to achieve a target of 400 net-tons kilometers per employee.

<sup>2</sup> NRZ was also required to provide USAID with a policy statement as a condition prior to disbursement of efforts to achieve a wage-revenue ratio of 35 percent within three years of executing the amended Project Agreement.

Under a proposed World Bank-financed restructuring plan, NRZ will be separated into three entities (e.g., infrastructure, equipment and operations). Once the entities are established each will either be concessioned or privatized. Project assistance provided under the CILP to improve NRZ's operational and financial performance supports future concessioning or privatization of the railway by reducing the labor force and improving the locomotive availability. The new World Bank's project adds to the sustainability of the project achievements by concessioning the locomotives previously maintained with USAID project assistance and taking advantage of the workforce reductions financed by USAID.

## **6.0 CONCLUSIONS AND LESSONS LEARNED**

### **6.1 Conclusions**

The main conclusions of this evaluation/final close-out report are the following:

- ▶ the project assistance was provided in accordance with U.S. procurement and disbursement procedures governing Commodity Import Programs and the use of local currency;
- ▶ the project was not implemented as originally designed and the approved inputs such as assistance to the road transport sector was not provided;
- ▶ the full development impact of the project was adversely affected by the curtailment of the inter-modal transport operations component of the CILP and the deobligation of project funds amounting to US\$1.4 million;
- ▶ the repeated changes in the USAID project managers, over the life of the project, did not allow for consistency of project implementation actions, follow-ups, monitoring of project impacts, and full assessment of the project needs;
- ▶ the project was successful in reducing the NRZ's locomotive maintenance backlog and improving the locomotive availability rates of the DE 10As and DE 11As mainline locomotives;
- ▶ the project achieved only limited, although significant success, in reducing NRZ's workforce because the average payout exceeded the PPS estimate by a factor of almost 3;
- ▶ the project was unsuccessful in reducing the wage-revenue ratio to 35 percent; and
- ▶ the financial and operational performance of the NRZ, particularly in rail freight transported and in operating revenues generated, improved significantly during the project.

### **6.2 Lessons Learned**

The main lessons learned that may inform other project designs, implementation processes and project management are the following:

- ▶ For maximum complementary impact, new or amended project elements and programmatic activities should be consistent with, and closely aligned with those of the existing project framework;
- ▶ Project elements and programmatic activities should be sized to available resources, in terms of both cost of inputs and of administration and management; and
- ▶ Administrative procedures should be designed such that their cost-effectiveness is in light of the project's expected development impact.
- ▶ Implementing a Commodity Import Like Program in an environment of a liberalized foreign exchange market effectively undermines the rationale for such a program. In an open market environment, private firms do not have limited access to foreign exchange, and are able to import the equipment and spare parts they require.
- ▶ The CILP was over-designed, given its stated objective, the amount of resources available to implement the project elements, and the modality of implementation. Actual project achievements and the sustainability of these achievements could have been accomplished with far less management resources and in a more cost-effective manner.

## ANNEX A.1

### CO-FINANCING PLAN, INPUTS AND PROJECT STATUS

Co-financier	Original Pledge (US\$ millions)	Currency of Expenditure	Amount Disbursed	Project Inputs	Project Status
World Bank	38.6	US\$	23.7	Spare parts, transmission lines, equipment, MIS system, technical assistance & training and studies	On-going
USAID	39.4	US\$	38.0	New and rebuilt locomotives, spare parts, technical assistance, training, & retrenchment support.	Completed
KfW	7.6	DM	7.6	Centralized traffic control system	Completed
Finnida	4.7	FM	4.7	Breakdown crane	Completed
Switzerland	2.3	SFR	1.3	Radios	Completed
Danida	3.7	US\$	3.7	Technical assistance & training, studies	Completed
Austria	1.8	AUS	1.8	Breakdown crane	Completed
Total	98.1	US\$	80.8		

Source: The World Bank, Staff Appraisal Report, 1990 and Interviews, August 1998.

## ANNEX A.2

### SUMMARY OF PROJECT CONTRIBUTIONS BY COST ELEMENT

ITEM DESCRIPTION	ORIGINAL PROJECT BUDGET	PROJECT AMENDMENT I	PROJECT AMENDMENT II	NEW PROJECT TOTALS	DE-OBLIGATED FUNDS
NEW LOCOMOTIVE COMPONENT					
13 New Locomotives					
Spare Parts	22.10			22.10	
Tools and Equipment	2.21			2.21	
Technical Assistance	0.40			0.40	
& Training	1.59			1.59	
Contingencies	2.63			2.63	
<b>Subtotal</b>	28.93			28.93	
REBUILD COMPONENT					
43 Caterpillar Engines		7.00		7.00	
Spare Parts		2.00		2.00	
Tools and Equipment		0.10		0.10	
Technical Assistance		0.06		0.06	
Contingencies		0.92		0.92	
<b>Subtotal</b>		10.08		10.08	
COMMODITY IMPORT-LIKE PROGRAM					
Locomotive Spare Parts	-		3.0	3.0	
Voluntary Early Retirement	-		0.11	0.11	
Evaluation/Final Close-Out	-				
<b>Subtotal</b>					
<b>Total</b>	<b>28.93</b>	<b>10.06</b>		<b>38.0</b>	<b>1.4</b>

Source: Regional Transport Development II, Project Paper, Project No. 690-0248, USAID/Zimbabwe, 1989.

### ANNEX A.3

#### PROJECT IMPLEMENTATION SCHEDULE

Description	Action Date	Responsible Party
Project Authorized	August 1990	USAID/Z, USAID/W
Project Grant Agreement Signed	August 1990	USAID/Z , GOZ
PIL No. 1	August 1990	USAID/Z
RFP for Locomotives, spare parts, and TA	September 1990	RCO,RCMO & RLA
PIO for IQC to review specification and assist with negotiations	September 1990	REO, EXO
CBD Notice and RFP to Major Suppliers	September 1990	RCMO, USAID/W
Proposal deadline	December 1990	Suppliers
Proposal Reviewed RLA & GOZ	December 1990	IQC, REO, RCMO
Negotiations	December 1990	As above
Contract awarded	January 1991	NRZ, USAID/Z
First locomotive arrives	March 1992	Supplier, NRZ
Last locomotive arrives	July 1992	Supplier, NRZ
PIL for Caterpillar engines	August 1990	REO,GOZ
RFP for Caterpillar engines	September 1990	REO.RCMO,GOZ
Proposal Deadline	December 1990	Suppliers
Proposal reviewed	December 1990	REO, RCMO, RLA, GOZ
Contract awarded	February 1991	USAID/Z, NRZ
First engines arrives	September 1991	Supplier, NRZ

First Shunter re-engined	December 1991	NRZ
Last engine arrive	September 1992	Supplier, NRZ
Last shunter re-engined	June 1994	NRZ
Project evaluation	March 1994	USAID/Z, GOZ
Grant Agreement , Amendment 2 Signed	February 1995	USAID/Z, GOZ
Grant Agreement, Amendment 2, CPs satisfied:	September 1995	GOZ
VERS Begins:	September 1994	NRZ
Bank/Letter of Commitment	October 1994	USAID/W
CILP Importation ends	October 1995	Private sector
VERS Ends	September 1997	USAD/Z, NRZ
PACD Extended	September 1997	USAD/Z
Evaluation/Final Close-Out Report	September 1994	USAD/Z, Consultants
PACR	September 1998	USAD/Z, Consultants

Source: USAID/Zimbabwe, Regional Transport Development II, National Railways of Zimbabwe, Project Authorization, Amendment Number 1 & Project Paper Supplement Number 2, 1994

## ANNEX A.4

## ASSESSMENT OF LOGICAL FRAMEWORK

<b>Narrative Summary</b>	<b>Objectively Verifiable Indicator</b>	<b>Means of Verification</b>	<b>Measurable Indicators</b>
Project Goal	Improve export performance contributing to economic growth.		
Sub-goal	A reduction in the economic losses attributable to costly and unreliable rail transport in the SADC region.		
Project Purpose (USAID component)	To strengthen and expand the capacity and operational efficiency of the Zimbabwe rail system.		
Project Inputs	1. Voluntary Early Retirement Scheme 2. Commodity Import-Like Program	1. Local currency financed VERS at Z\$33.74 million. NRZ's personnel and accounting records. 2. Spare parts procured for US\$3.0 million. Importer's record, NRZ's records.	
Project Outputs	1. Workforce reduced from 13,300 to 10,300. 2. Improved Inter-modal transport operations.	1. NRZ reduced labor force by 400 employees, 16% of target. 2. Project component not implemented, remaining of authorized funds of US\$1.4 million deobligated.	1. NRZ records indicate this output was not achieved. 2. No results to report project element was not implemented.